3. The method of claim 1, further comprising:

preventing starvation of one of said function instances by determining a recent time period where said instance function contains signal energy that would allow an execution of one of said instance.

4. The method of claim 1, further comprising:

fuzzification of a plurality of inputs by said fuzzy inference system.

- 5. The method of claim 4, wherein said fuzzification comprises associating said inputs with a plurality of membership functions.
- 6. The method of claim 1, further comprising:defining a plurality of rules for scaling an output of said fuzzy inference system.
- 7. The method of claim 6, further comprising:

aggregating a plurality of said scaled outputs into a single fuzzy output variable, wherein said output determines said importance of said instance function.

8. The method of claim 1, further comprising:

ordering, with a scheduling priority fuzzy inference system, said instances to receive said processing resources.

9. The method of claim 8, further comprising:

determining an amount of the processing resources available for distribution to each of the function instances; and

allocating the available processing resources to the function instances according to said ordering.

10. The method of claim 1, wherein said identifying comprises identifying a plurality of echo canceller instance functions that use said processing resources; and

said determining comprises determining said importance of at least one of said echo canceller instance functions using said fuzzy inference system.

- 11. The method of claim 10, further comprising:
  fuzzification of a plurality of echo cancellation inputs by said fuzzy inference system.
- 12. The method of claim 10, further comprising:

  updating a local state information storage with a plurality of echo cancelling instance events:

determining, from the local state information storage, the available processing resources for said echo canceller instance functions; and

allocating available processing resources to the echo canceller instance functions according to the importance of said instance functions.

13. A system to determine an order a plurality of function instances to receive processing resources, comprising:

a function ordering module, comprising a fuzzy inference system, to determine an importance of at least one of said function instances using said fuzzy inference system; and a resource allocator to allocate processing resources to said function instances.

- 14. The system of claim 14, wherein said function ordering module prevents a starvation of one of said function instances by determining a recent time period that said processing resources were allocated to said one of said instance functions.
- 15. The system of claim 14, wherein said function ordering module prevents a starvation of one of said function instances by determining a recent time period where said one of said instance function contains signal energy that would allow an execution of said one of said instances.
- 16. The system of claim14, wherein said fuzzy inference system performs fuzzification of a plurality of inputs.
- 17. The system of claim 16, wherein said fuzzy inference system associates said inputs with a plurality of membership functions.
- 18. The system of claim 14, wherein said function ordering module defines a plurality of rules for scaling an output of said fuzzy inference system; and

uses an aggregation process to combine said scaled outputs into a single fuzzy output variable.

- 17. The system of claim 18, wherein said fuzzy interface system maps a plurality of inputs to an output, wherein said output determines said importance of each instance function.
- 19. The system of claim 14, further comprising:a resource tracker for determining an amount of the processing resources available for

distribution to each of the function instances; and

a resource allocator for allocating the available processing resources to the function instances according to said importance.

- 22. The system of claim 14, wherein said function ordering module determines an importance of a plurality of echo canceller instance functions.
- 23. The system of claim 22, further comprising:

an allocator for allocating said processing resources to the echo canceller instance functions according to said importance.